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SEABOURNE REPORT  
VOL. IV  
BIOGRAPHY OF MAJOR  
FERDINAND FEICHTNER

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Auth: C.O.G. Nantz AAF  
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**THE SIGNAL INTELLIGENCE SERVICE  
OF THE  
GERMAN LUFTWAFFE**

**VOL. IV**

**BIOGRAPHY OF MAJOR FERDINAND FEICHTNER**

**C.O., 352nd Regt., (South),  
SIS, German Luftwaffe**

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VOL. IV.

## BIOGRAPHY OF MAJOR FERDINAND FEICHTNER

C.O., 352nd Bgt., (South),  
SIS, German Luftwaffe

### FOREWORD

1. Contained within Vol. II of the record covering the history, operations and techniques of the Signal Intelligence Service of the German Luftwaffe during the course of World War II, will be found individual biographies of the officers of that service who contributed to the compilation of the record over the days following immediately upon capitulation of the Wehrmacht. The biography of one of the contributors, Major Ferdinand Feichtner, is, however, separately presented in this volume for the following reasons:

a. By general acclaim of his fellow officers he is credited with having made the greatest single individual contribution to the development and subsequent successes of the Signal Intelligence Service of the Luftwaffe.

b. Beginning with enlistment in the Reichswehr in the year 1926, virtually his entire military career as a professional soldier was spent in the Signal Intelligence Service, and he is an authority on the tactics and techniques of its employment.

c. The biography is so richly interspersed with comments bearing upon vital military history, decisions and operations, as to set it off from those presented in Vol. II, and to warrant this comparatively slight prominence accorded it.

J. G. SEABOURNE  
Colonel, Air Corps,  
SIS, USAAF.

*Paragraphs and extracts shown  
with a red asterisk have been  
downgraded to "Secret" per  
1st Ind dtd 9 June 50 to the  
in CA, 45AFSS, filed in  
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PERSONAL DATA.

**Personal Data:** Born 3.2.1908, son of the merchant Jakob Feichtner, and his wife Elizabeth. Married 14.5.1939. No children.

**Schooling and Professional training** Grammar school in Übersee on the Chiemsee  
Apprenticeship as an electrotechnician and machinist.  
Gesellenprüfung (trade examination) and special school for electrical engineering  
Passed Abschlussprüfung I (trade examination) in the Army trade school.

**Military Promotion**

1. 5.1926	Private
1. 5.1928	Radio operator
1. 5.1930	P.F.C.
1. 5.1932	Corporal
1.12.1934	Sergeant
1.11.1935	1st Sergeant
1.10.1937	Sergeant major (Bn.)
1.12.1938	Sergeant major (Rgt.)
1. 3.1939	Transferred to Luftwaffe
1. 5.1940	1st Lt.
1.11.1940	Captain
1. 6.1944	Major

**Posts**

1. 1.1938	- 30. 8.1938	Chief of evaluation, Spanish war in Spain
26.8.1938	- 30. 4.1940	Chief of evaluation, W-Leit 3
30.4.1940	- 28.2.1941	Head of school of Signal Intelligence Söcking
28.2.1941	- 31. 5.1941	Chief of Chi-Stelle, Referat B
1. 6.1941	- 14. 3.1943	Company commander, Athens
15.3.1943	- 17.10.1944	Battalion commander of SIS, Southeast
18.10.1944	- 8. 5.1945	Regimental commander of In.Rgt. 352

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Biography of Major Ferdinand Feichtner,  
Commander, 352nd S.I.S. Regiment (South), German Luftwaffe.  
Written: July, 1945.

- 1922

I was born on the 3rd of February, 1908, in Augsburg, Bavaria. My father was a merchant, and died two years after I was born. My mother carried on the family business until she fell ill. In 1920 I lost her as well. After that my grandparents took over my education. During my youth I showed no inclination toward study, although it was always the hearts desire of my mother and grandparents that I should. So I never went further than the Volksschule (Grammar School).

Apprenticeship  
1922 - 1926

In 1922 I started apprentice training as an electrical technician, on my own initiative. From a very early age I have been interested in technical things. While an apprentice I went to the manual training, electrotechnical school in Traunstein, Bavaria. In 1925 I passed my licensed electrician examination (Gesellenprüfung). I remained with my master until I entered the Reichswehr.

Entrance into the  
Reichswehr 1926

I always found happiness in the idea of a soldier's life, perhaps because of my grandfather, and my many relatives who had served in the Army. A friend who had signed up with the Reichswehr a half year before me gave the final push to my decision by the stories he told of his soldier's life. I reported to the 7th Signal Battalion in Munich. After filling out a questionnaire I was marked as a possible candidate, but told immediately that while many applied very few were accepted. Unemployed candidates were automatically disqualified.

Mustering-in  
May, 1926

On May 1, 1926 I was mustered in. The four most suitable candidates were selected from about 35 - 40 aspirants. Mustering in took three whole days. The first day was taken up with an extremely thorough medical examination. Candidates with the smallest physical defect were disqualified on the spot. On the second day a physical performance examination under medical supervision was administered. The afternoon was given over to written work. The third day we were given a psychological examination. After that was over I found myself among the four lucky ones who were to be accepted by the Reichswehr. In the agreement I had to sign an enlistment for 12 years. I must admit that I still consider this moment one of the most important and decisive of my whole life. By this signature I put my youth in pawn with the state, and when I think about it, I can easily say my youth was immolated.

Recruit Training  
Second half 1926

Immediately after my enlistment I was given my uniform and took the oath. The next day began my training in an infantry training battalion in Erlangen. This was the most exhausting part of my military career. We were awakened at 0400 hours in the morning. At 0445 we stood in field or parade uniform in the yard of the barracks. In the 45 minutes between waking and falling in, coffee had to be brought, beds made, and rooms and corridors cleaned. Every minute was fully taken up. The morning

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was occupied with drill. During the two hours allowed for lunch, we had not only to fall in for a mess formation but also find time to get our gear and uniform in order. During the afternoons and until 1800 hours we had more drill or instruction. Again we had to fall in for supper formation. By taps, at 2300 hours, the whole dormitory except for the NCOs, who reported the room in, had to be in bed. A large part of our spare time was given over to the pursuit of cleanliness. Overnight passes were given out only on Saturday or Sunday, and until 0100 hours. Although this was a rough experience, I would never have wanted to miss it. Great emphasis was placed on sport and hygiene. Fatigues, field cap, and socks had to be washed by the men themselves and laid out for inspection every Monday.

After six months of basic training there followed a final inspection on the maneuver grounds at Grafenwöhr. The three weeks maneuvers we engaged in there gave the finishing touch to our basic training. Every day from 0330 to 1800 hours was filled with extended order drill and target practise. The day's work finished usually with a review taken by the commanding officer.

In November, 1926, I returned with my comrades to the 7th Signal Battalion in Munich. The six winter months were spent in the riding hall or in the stables working on the horses. In April of the following year we rode in the field. We were also taught to drive horses. Most of the signal battalions in those days still used horse-drawn vehicles. The summer exercises and autumn maneuvers, which we enjoyed immensely, as they freed us from the pressure of the garrison, brought this period of training to a close.

In the fall of 1927 we became telephone men. Again the six months of winter were devoted principally to theoretical training. We achieved a thorough knowledge of all telephone equipment. After this came the construction of long lines with light and heavy field cable, telephone poles, and switchboards. At the same time we learned Morse code. Whether or not we would receive further training in radio depended on how well we did at this work. Only those became radio men who showed good technical aptitude and could send and receive at least 20 to 25 words per minute.

The 7th Signal Battalion was a mountain battalion, so this time our summer training began with four weeks of high mountain maneuvers, the most strenuous but the finest military exercises I engaged in during my whole service.

Coincident with my telephony training was a course in blinker signals. We used light and heavy blinkers. The light blinker gave good results at 15 Km; the heavy one enabled us to bridge such distances as 45 Km. We only had one heavy blinker, which was soon taken from us by the international

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control commission, who determined that it was against regulations. During this time we also received training in the use of carrier pigeons.

Radio Operator  
second half 1928

After completing the telephone course I was assigned to a radio platoon. During the winter we received technical and practical instruction in radio, and learned procedure. We spent our afternoons in the training laboratory, where we put radio sets in order which had sustained damage or had troubles put in purposely. Smaller radio communications exercises, having to do with the rapid erection of radio stations, interspersed the classroom study. This instruction, as typical throughout the Reichswehr, was carried out in a very disciplined manner. Each week a particular objective was assigned. Anyone who could not qualify at the week's end was required to take instruction during what otherwise would have been his free time in the evening. Besides he had his overnight pass taken away. Equitation continued through the telephony and radio courses, and adequate provision was made for development of the physique.

Allied Control  
Commission

We young soldiers were deeply impressed by the international control commission, members of which were allowed, until the year 1930, to appear unannounced in the garrisons, and inspect them from cellar to attic looking for forbidden military equipment. At the same time the exact strength in personnel, according to grades, had to be exhibited. Once in the course of such an inspection two 100 watt low frequency transmitters were discovered. They had to be junked immediately. The most powerful transmitter we were allowed for field use was 20 watts. Only the Wehrkreisfunkstellen (Corps Area Radio Stations) were allowed more powerful transmitters for communications within the Reichswehr. Horse drawn vehicles were checked on just as severely. The allowance was so meager that on maneuvers the permissible T/E was nowhere near sufficient to carry the baggage train. Therefore every unit made sure of some extra vehicles, which were hidden in some safe place. Only a very few trusted people knew about this. And as the vehicle pool even thus expanded was still insufficient, horses had to be rented from the peasants for the duration of the maneuvers.

Motorization

Motorization was in its first beginnings. In 1930 a signal company had 1 passenger car, 2 trucks, 2 motorized radio installations and 2 telephone construction vans. Gradually this motor pool acquired additional vehicles.

Organization of  
Signal Troops in  
the Reichswehr  
1924 - 1934

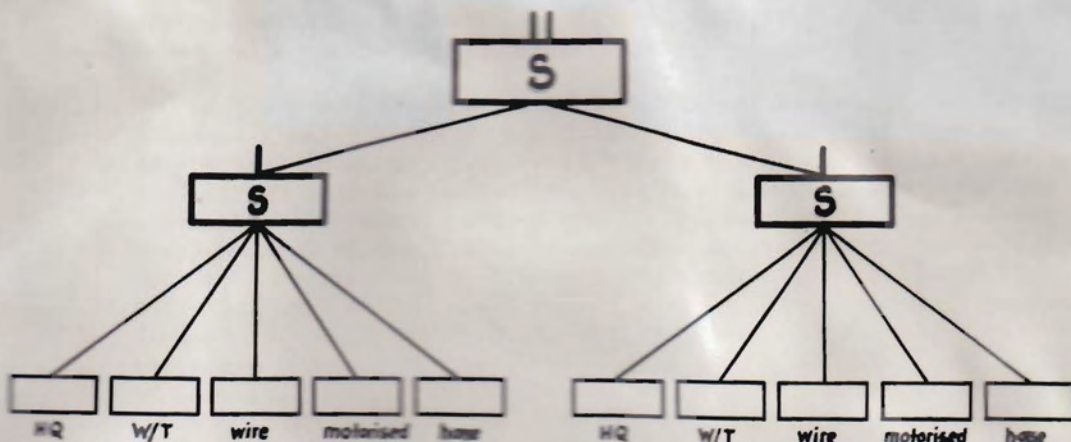
Each of the 7 Wehrkreise (corps areas) had a signal battalion. These consisted of two companies, which in turn had in equal strength a hq. platoon, a motor pool, a radio platoon, a telephone platoon, and a transportation platoon, (with horses). After 1928 the first company

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specialized in wire, and the second in radio, but without it being possible for either company to acquire more personnel or equipment.



**Physical Training  
Course in Wunsdorf**

In the spring of 1929 I was sent to a three months' physical training course in Wunsdorf. This temporary duty represented a distinction to me, and gave me much pleasure. Since early youth I had devoted my free time to sports, and had been an enthusiastic trackman and light athlete as a soldier. Sundays during the winter were always spent skiing.

**Intercept Operator  
July, 1929**

I made agreeable progress as a radio operator. My technical inclinations stood me in good stead during instruction in sets and theory. On the side I was also an enthusiastic amateur. In July 1929 I was sent on temporary duty to the intercept station in Munich. All temporary duty was enjoyed, because it was a relief from the monotony of garrison life. But this assignment gave me particular satisfaction after I got myself worked in to the new mission, because no other occupation was so pleasant to me as that which was now my duty.

**Coverage of Italy  
Second half of  
1929  
Diplomatic traffic**

At first I was used in the coverage of Italy. Later I covered Italian colonial and air force traffic. At times the station was assigned the coverage of diplomatic nets. It was hard work, as most of the traffic was sent with automatic transmitting machines, which was ordinarily received with a special instrument. We developed such an ability to intercept that we could read messages sent at high speed by following the thought. In addition to serving as an intercept operator, I received a thorough training as a D/F operator. The instruction was first given in the classroom, later in the field.

**D/F training**



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Analysis and Evaluation Courses

Each year there were courses in evaluation and analysis. I took one in traffic analysis and D/F plotting, and another in the evaluation of text. The courses were very fruitful. The material for the course consisted of daily reports and messages from the log sheets taken while monitoring during maneuvers.

School and Promotion in the Reichswehr

In the year 1930 I was sent to a six months course for NCO candidates. These courses were much feared, because they required not only a high level of military knowledge but also considerable physical effort from the individual. Besides, the selection was very carefully made, since so many candidates were available, and the average level of the individual soldier was extraordinarily high, due to the strict requirements for enlistment and the long, rugged training. Only a very small number - about 2 or 3 men to a company - could be promoted each year to sergeant, as this was the number of sergeants discharged each year after having completed their 12 years of service. To fill their place at least 7 or 8 years service was required. Staff Sergeant took ten years service. There were only two master sergeant berths on the T/O of a signal company. So to have passed the NCO candidate school was not by any means an assurance of prompt promotion. The NCO candidate performed a sergeant's duties without any taste of a sergeant's privileges.

Search for Intercept and D/F sites 1930 - 1933

In the fall of 1930 I took charge of a team to find and test out a good site to set up an intercept station in southern Bavaria. A site near Söcking proved to enjoy the best reception characteristics. Even during peace-time, about 1932, we reconnoitered for good sites for reception and D/F along the Czechoslovakian border. Exact geographical location of these sites was fixed, so they could be made use of without delay in the event of maneuvers or special coverage requirements of Czechoslovakian traffic. During the occupation of the Sudetenland this preparation proved very helpful. Sites were also tested along the Alpine frontier for a good spot from which to intercept Italian traffic. Here our work was particularly difficult, because mountain chains of over 10,000 feet in height had to be surmounted between the area to be covered and the point of reception. It was even more difficult to find favorable sites for D/F. We made interesting comparisons between reception on plains and on mountains. During clear weather results in the mountains were superior, but during bad weather atmospheric disturbances made reception impossible. Exact data was compiled covering every operational site, so that the most advantageous one could be occupied according to the particular mission. In the course of these tests we developed our antennas, and established the best antenna for each set. It was remarkable to note that the directions on antennas in the technical orders agreed down to the smallest detail with our actual experiences.

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t exercises

Every spring as platoon leader I would take my soldiers on a set of daily problems. I experimented with them in the erecting of intercept stations in the field, as well as in transmitting messages by radio or wire, and always concentrated the operation on a particular area of intercept coverage.

s Accession

January 30, 1933

Accession to power by National Socialism brought no changes into our lives. Removed as we were from the clangor of party politics in Germany during the post-war period, as we were from the realities of German everyday life, entirely dedicated to our rigorous and austere profession, the accession to power of Hitler, to most of us seemed nothing different from one of the changes of government that were an habitual feature of the Weimar Republic, where a ministry scarcely ever maintained itself for more than half a year. Due to the basic tradition of the Army and the statesmanlike qualities of Colonel-General von Seeckt, founder of the Reichswehr, German policy had forged therein an instrument that was unaffected by party strife and petty political quarrels. Soldiers of the Reichswehr were denied the franchise; political activity was deemed beneath the dignity of a German officer. In the officers club political discussion was severely banned, and the soldiers, after a day of hard toil, were interested in nothing but simple recreation. On the other hand the Reichswehr enjoyed the favor of all ministries in succession, because every ministry realized that these armed and trained reserves represented the final basis of its own power. On the side of the Reichswehr, in turn, the great example of loyalty set by Hindenburg, and the instinct of every German to take authority for granted were ever present and alive even to the last soldier. Surely the Reichswehr would have served equally faithfully a Communist regime if the latter had respected basic morality, moderate and enlightened nationalism, and the military traditions of the German soldier.

al Socialism  
d Reconstruction  
the Wehrmacht

National Socialism met the professional army with great favor and unusual tact. The outstanding figure of Hindenburg still guarded the leadership of the Reich. Hindenburg enjoyed overwhelming popularity among the officers and soldiers. He was for us all the embodiment of our profession. His speeches were the only ones that were listened to without exception in our barracks. Regardless of his extreme age his death in August 1934 caused a deep consternation among us. Everyone asked what would happen in the future. But Hitler paid tribute to the Reichswehr in every respect. Nowhere was the dreaded influence of the SA and SS to be felt. On the contrary, a certain military influence penetrated all branches of public life, not always to the best interests of the Germans. The traditional mistrust of the officer corps, which at first remained aloof, recruiting itself still largely from the

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conservative classes of German society, as a bulwark against "mass movements", gradually gave way and changed entirely under what was first clandestine, and beginning with 1935 open, rearmament which offered to every professional soldier the greatest opportunities in his career. Although the hasty and clamorous way of developments aroused some criticism among the clear-sighted soldiers, and created doubt as to its soundness, it could nevertheless be proved by countless examples that the success of the early years made an officer corps, on the whole, no less arrogant and pretentious than the leadership of the Party. Greed for power, haughtiness and incapacity were likewise wide-spread in authoritative parts of the Wehrmacht; only the worst excesses in manners were smoothed down perhaps by the traditional discipline of a military machine that while it gained us some admirers also fostered against us a world of enemies.

Intercept Station  
Socking

In 1934 we moved into the building newly constructed on the site in Socking which I had tested out some years before for intercept purposes. It was equipped with the latest technical facilities. Again it turned out that the antennas especially built for us by the firm of Lorenz proved unsatisfactory, and we had to construct and erect those that we had found to be best as a result of our own experiments. This move substantially improved our reception, and consequently the intelligence we derived from the logs.

Marriage  
May, 1934

Six months before my promotion to sergeant I married. After six years of service, soldiers were allowed to get married. Married soldiers had the right to live off the post, which bachelors did not. I derived very little benefit from this privilege, because I was constantly being sent out on temporary duty, and during my nineteen years of service found little enough opportunity to live with my wife.

Change in Command  
at Socking  
Second half 1934

With a change in the command of the post, there came a decline of operations. Although the new commander was a high frequency engineer, and brought with him all the technical requirements for his job, he did not succeed in contributing any new incentive to our work, but on the contrary showed little interest in his profession. That was the way it always was: the amount of intelligence turned out by a station would stand or fall depending on the personality of the responsible chief. My first chief, then 1st Lieutenant Karn, later captured by the Americans in Africa where he was Rommel's Army Signal Officer, was for me the perfect example of a radio intelligence officer. He was not only equal to all technical problems, but was also an able tactician and commander of troops, who knew how to draw the maximum performance out of his men. The two years I spent under him were of decisive importance to my subsequent career and personal development.

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Deployment of Luft-  
waffe Civil Ser-  
vants

In 1935 we took over the training of the Luftwaffe civil servants, who were being prepared for the future Luftwaffe H-Dienst. Here the most widely, divergent types could be studied. Only very few of them proved really useful. At this time the level of employment in Germany was so high that there was not much choice in the selection of personnel. So among these civil servants, there was a number of people whose principal objective was to make a lot of money without doing any work. Very few possessed any technical knowledge. These men stayed with us three years.

Platoon leader on  
the Wendelstein

In 1937 I was ordered to find a location for an advanced intercept station on the Wendelstein. I found a dairy farm house at about 1300 meters elevation, and put my technical installations in it. It became one of our best out-stations, and excellent traffic was picked up there, especially of the Spanish Civil war. Until I was sent to Spain I remained up there, serving as platoon leader in the remote and lonely Alpine country.

Duty in Spain  
1938

In the beginning of 1938 I was sent to Spain. I took over analysis and evaluation in the intercept company operating there. In those days the company was not worth much. There were a few specialists in it to be sure, but as so often happens in the Army, they were almost all in the wrong job. It took four weeks for me to get them fitted into the right jobs, and my comparatively low grade of staff sergeant provided an abundance of additional difficulties in this effort. The company was dominated by the prejudice that they would have to content themselves with a minor role in the struggle, because the Reds were not using radio communications on a very large scale. I found this inexplicable, because the bolshevik command operated very primitively in every other respect, and telephone lines were certainly not abundant in Spain. After carrying out a reorganization of the disposition of our receivers, within a few weeks I could show evidence of abundant Red Spanish radio traffic. My principal objective was to establish the locations of the Red Spanish units by following the point-to-point traffic. This came about relatively quickly, so that by intercept and D/F we could trace the order of battle, and later every move of the Red Troops all the way down to battalions. From the study of the radio traffic alone the enemy's intended offensives could always be determined well in advance, which was of especial value to the German-Spanish High Command.

Red Customs Radio  
Stations

Customs radio stations in Red Spanish waters gave eminently valuable information on ship movements of the Reds. Many a ship was sent to the bottom by German bombers or speed boats thanks to our reports. Again and again it happened that a ship arrived in a Red port to be unloaded of its freight. This was often accomplished by our bombers before the unloading detail could get to it.

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Red Ground Observer Service

Particularly rich sources of information were the radio nets of the aircraft reporting stations. Similar to those of the Allies in the Mediterranean, these were assigned the mission of reporting all observed aircraft movements, both friendly and enemy. Often our bombers or fighters took off on the basis of these reports alone, and thus brought destruction to these sorties which had been betrayed in such an asinine fashion. The aircraft reporting stations were set up along lines parallel to the front. They changed position always in advance of the major changes in the front lines. They also usually told when they were moving and where to. Their codes could be read immediately by our men. In the beginning their enciphering system was very simple, but later they made use of more complicated procedures. Since the reports followed a stereotyped pattern, their ciphers could always be cracked. Of great assistance in making cracks were the daily strength reports, which were always transmitted at a certain hour, and whose text followed an unchanging pattern.

Fundamental principles of enciphering

From this it can be seen that the word sequence in enciphered texts must be changed frequently, and above all, that the preamble must not always come at the beginning, but rather should be worked into the body of the text. Most important is the avoidance of any stereotyped pattern in the text itself, for the use of any kind of methodical system in cipher procedure means certain compromise. Hard and fast military forms are poorly suited to cryptographic security. The Reds should at least have sent their movement orders in a special secure cipher, rather than the ordinary one.

Warning service

As we were advised of our own troop movements, we were able to notify our own men well in advance of Red air attacks, and saved many lives in this way. Frequently the red aircraft observation stations had to sit and "take it", while the Red aviation units excoriated them for giving directions to targets they never found.

Change of Call-Signs of the Red Spanish Army

Whereas in the beginning the Reds did not change their call signs for long periods, they later introduced a change every four weeks, then every week, and lastly every day. Also they took the step of giving stations in a net 2 or 3 call-signs each, to achieve a deception as to their actual order of battle. At first the change of call-signs made things difficult for us, but after we got on to the system that was behind this change we could provide our out-stations with lists of call-signs for the next day. It was just as easy to clarify the call-signs of the individual subscribers in the net. Frequencies were only very rarely changed.

Coverage of Air Force Traffic

At this period the Army did not yet ascribe any value to the coverage of Air Force radio traffic.

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German Cipher  
Devices

For enciphering our own messages we used the cipher machine "Enigma" and for very short messages a code. It was apparent from the deciphered messages of the Reds that they also had a signal intelligence service.

Operational Sites,  
German SIS

Our operations were concentrated first on the Northern front; later, on the central sector. According to where an offensive was planned, intercept platoons were assigned to the larger unit command posts. The problem of signal communication in Spain deserves a chapter by itself. Telephone lines were unknown. We could get in touch with our own teams and platoons only by radio communication.

Impressions of  
Spain

When war broke out in Spain I had built up in my mind a picture of the situation based on articles in the German press, as had practically all other people in Germany. The picture was basically that the conservative European spirit, represented by Franco, was contesting with the horde of undisciplined Red despoilers of churches and destroyers of culture under orders from Moscow, for the domination of Spain. When I came to Spain I was most impressed by the lack of a middle class, the extremely low standard of living of the Spanish rural and small-town population, the lack of civilized appurtenances, and the striking contrast between rich and poor that was everywhere apparent. Also public morals, seen through German eyes, pointed to a condition of libertine abandon to which central Europeans were quite unaccustomed. These conditions were similar on both sides; only Franco tried with some success to achieve economic stability in the areas he occupied, and restrained his troops from actions prejudicial to the civilian population; whereas on the Red side there was raping and vandalism in true Russian style. But the Red Army was at least as good as Franco's in discipline and armament, and there was no visible sign of the guerilla fighters and hordes so played up in the German Press. In the beginning of 1938 after the Reds made their successful offensive near Teruel, the Nationals were faced with a serious crisis. Finally, Franco's break through to the Mediterranean brought a change of fortune, and then the Russian Bolsheviks began to see the uselessness of this Spanish war, and stopped sending materials. But we were convinced that with Franco's victory the basic struggle had still not by any means been settled; that the wretched social conditions in Spain would always offer fertile soil for the work of Moscow.

Unsuccessful At-  
tempt to Get Dis-  
charged From the  
Army

In September 1938 I left Spain at my own request, for my 12 years service had already terminated in May, and I did not want to stay in the Army any longer. I wanted to take the examination known as Abschlussprüfung I, preparation for which was interrupted by my service in Spain. I planned on getting a job with Telefunken. But my discharge from the Army was not approved. When I registered my objections I was told that I could not be held in the service against my will, but that

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I must reckon with the unpleasant entry in my records that I had abandoned my Fatherland in its hour of utmost need. This threat persuaded me not to press the matter further, because a remark like that in my service record might have had the severest consequences for my civilian career in the Party dominated state.

From my fourth year of service on, I, as well as all other soldiers of the Reichswehr had to spend two afternoons a week during the winter months at the Army Trade School. Here it was possible to get instruction either in technical subjects or trades, or for industrial management. The choice was ours to make. Attendance at the school counted as service. The purpose was preparation for a subsequent civil service career, in which soldiers with 12 years of service were given preference. After the failure of my efforts to be released, I passed the Abschlussprüfung I. Then I was transferred to the Luftwaffe and forced to take a civilian technical employees course in communications in the Air Communications School at Halle. I was infuriated by this assignment, because my decision never to hold this sort of civil job remained unchanged. The whole assignment was typical of the well-known Prussian way of dealing with people. Those soldiers who intended to become civil servants, and possessed the requirements for such a career, were excluded from the course, and we, who wanted no part of it, were held over and sent to the school. The attitude of the pupils was reflected in the atmosphere of the school. I requested the director of training repeatedly to release me. He refused. Finally I resigned myself to my fate and worked for a radio certificate first class, which I hoped would bring advantages in my civilian career. What lay behind this shameful situation was the large requirement of the Luftwaffe for technical employees, who were simply recruited from soldiers who had served a long time in the Reichswehr accustomed to doing what they did not want to do. The blind random process by which this was done was typical of the highly placed persons in the Luftwaffe Technical Training Command. After six months I finally got out, thanks to the Chief of the Personnel Section of Luftflotte 3, to whom I appealed personally. He transferred me to the SIS Battalion of the Luftflotte shortly before the war began. So I returned from Halle to Munich.

Some days before the outbreak of the war, I was ordered with four comrades on an experimental voyage with Zeppelin LZ 129, construction of which had just been completed. The voyage started from Frankfurt at twilight. We sought to intercept French and English radio beacons and D/F them. The expedition was organized by the Chi-Stelle of the Air Ministry, and was typical of their planning. As the operation was classified "Top Secret", we had no voice in the selection of the equipment to be used by us. This was selected and prepared by the civilian employees of the Chi-Stelle. Shortly after the start we discovered that the sets required for the work were not aboard. So this three-day trip

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Preparation for a  
Civilian Career

Signals Course,  
Halle, 1939

Voyage in a Zep-  
pelin,  
August 1939

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along the French, Belgian, and Dutch borders, and in the neighbourhood of the English coast, ended, due to the beautiful summer weather, as a lovely holiday outing. As only, with few exceptions, the discredited civilian employees of the Chi-Stelle took part in this trip, we suspected that the expedition was due to their fanciful brain work, and that the technically-innocent officers who had favored this trip, had gone out on the limb. As I heard from comrades, a similar voyage under the same circumstances with much the same results had been undertaken by employees of the Chi-Stelle back in 1938 before the occupation of Czecho-Slovakia.

Chief Evaluator in  
the Wetterfunkleit-  
stelle 3, (W-Leit  
3), Autumn 1939

So when the war broke out I was again living a soldiers life. As master sergeant I became section chief for operations, evaluation and analysis at Wetterfunkleitstelle 3. The C.O., an able SIS officer, later transferred back to the Navy, advised me in the spring of 1939 to become an aspirant reserve officer. I was not enthusiastic, as I feared complications might arise from such a move, and I wanted to get out of the Wehrmacht at any cost. When the war began I was forced to take a course in Halle in order to become an officer. As I had already had more to do with this school than I had ever bargained for, I voiced unmistakable objections, and finally succeeded after a lot of unpleasantness in getting released from the school. On May 1, 1940 I was commissioned 1st Lieutenant, and a half year later I became captain.

Beginnings of  
W-Leit. 3  
Autumn 1939

In contrast to Leitstellen, which were already operational when the war began, W-Leit. 3 had to be set up. It started with a very limited quantity of personnel and equipment, and at first was only a staff organization set over the SIS-companies in the area of the Luftflotte. The operational and administrative authority was still divided. In the area of Luftflotte 3 there were in addition to the Leitstelle two intercept companies and three fixed SIS-stations. Divided authority, and the soldiers being thrown together with civil employees made for a thousand difficulties, and interfered with getting the work done in a way that was hardly bearable. Added to this was the fact that the Chief Signal Officer, who decided on all matters of cipher devices, telephone lines, and technical equipment, knew nothing about the Signal Intelligence Service. It is amazing that out of all this broth of factions working against one another, any positive work was achieved.

Officer Problems  
in the Air Signal  
Corps

My difficulties began when I had to assign duties to intercept companies the officers of which were total strangers to the SIS. After many struggles it was finally possible to get them relieved. The conflict between the passion for soldiering on one hand and the comparatively drab life of an SIS man on the other, the richly varied personalities, and the vague relation between the SIS and other branches of the armed forces, a result of the security measures which shrouded the whole enterprise, were all a constant source of irritation, which only

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straightened itself out gradually in the course of years. The opinion was commonly voiced that the SIS would have done better in civilian clothes. This must be contradicted. For with such uniform conscious people at the top, the SIS in civilian clothes would have had a still harder time winning its place in the sun. In my opinion the fault lay with the insufficient technical training of the officers in the signal corps as a whole. In general the erroneous theory was held that the officer in the signal corps must not burden his mind with details, but by maintaining a general picture of what is going on, he must understand how to give orders. Here he is at a disadvantage with respect to his noncoms and enlisted personnel, who at least have been taught to use the set they were assigned; not to speak of traffic and evaluation specialists, the thorough-going experts in their field, who could pass so much more authoritative judgement on things. A further consequence of having non-technical men handle the results of work by technically trained men, was that Regular Army Officers of the flying units and the flak looked upon the Air Signal Officer Corps as second rate. The problem of officers was particularly acute in our field. The signal corps of World War I was very small, and in addition technically superannuated. During the period of the establishment and expansion of the Luftwaffe young officers technically trained in signal communication were insufficient in number to meet officer requirements. Accordingly veteran officers of the arms of the service were put through a four weeks refresher course in the signal school at Halle, and then assigned as signal officers. According to their grades they were given a corresponding job. In this way the younger officers were deprived of the opportunity of active responsibility in the development of the growing Air Signal Corps, because the old officers turned all their attention to the one thing they knew something about, administration. So the growth of the Air Signal Corps was a pitched battle not only with outsiders, who had no notion of its value, but between the junior grades, with their flexibility, youth, and interest in things technical, and the obfuscationist policies of their superiors. I could quote a thousand instances of this out of my own war experience.

Intercept and D/F  
Stations  
Winter, 1939

D/F command net  
with W/T auxiliary  
communication

My duties in the evaluation section were not confined to paperwork. My first concern was much more the proper operation of the intercept and D/F stations. I was a master sergeant at the time and my job was made the more difficult by the ignorance of company grade officers. In this period the SIS Battalion was operating against France. For the first time in the SIS I introduced D/F command nets operating on W/T for communication. I myself evolved the procedure and cryptographing used in this system, after the chief signal officer, a specialist in long lines outside, refused to understand why anyone should want radio communications in a D/F command net, and held up the allocation of frequencies and call signs for this purpose.

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Transfer of  
W-Leit 3 to Roth

French R/T

After the outbreak of war Luftflotte 3 was transferred from Munich to Roth near Nurnberg, where W-Leit 3 followed. Although my proper station was in W-Leit 3, I spent a lot of time on trips. In those days our Ground Observer Service reported enemy flights every day along the Rhine frontier. According to my way of thinking these fighters must have been controlled from the ground, as our German fighters which had a radio telephone set on board the plane. The C.O.'s of the intercept companies whose job it was to cover these flights did not trouble their brains about this matter. By studying an almanac on French aircraft I found out what kind of radios they used, their frequency range, and their antenna performance, and I brought it about that a team of linguist R/T operators were sent to the Rhine with the proper equipment. After a short search the first traffic was picked up. As had been foreseen the French fighter pilots talked a great deal, and often to no purpose. After this success R/T teams were set up in conjunction with fighter control stations, who passed on the French fighter talk to the control stations. In this way a number of air victories were made possible, and the SIS gradually became a valued auxiliary of fighter control.

R/T teams with  
FCC

Transfer to Orb

In November 1939 Luftflotte 3 was transferred to Bad Orb near Frankfurt. While all the other staffs and units of the Luftflotte set themselves up in fine quarters, we were made to live in bathrooms. This shabby treatment is indicative of the small standing we enjoyed, although we had already some considerable achievements to our credit. But the SIS long remained in the eyes of the non-tactical officers as a superfluity, due to the modesty of responsible SIS officers, and the strict security, which made it impossible to do any "political" campaigning for our work.

Airborne Intercept  
Operations

In May 1940, the idea was conceived to install in a JU-52 eight VHF receivers, frequency band, 25 to 50 Mcs. The mission was that of intercepting VLF R/T and W/T along the French border. This I considered both technically and tactically unsound. The commander of the JU-52 was a young lieutenant, ignorant of SIS techniques, but full of a lust for glory. Though orders for the mission designated that for security reasons the mission should be flown at a distance of fifty kilometers behind and parallel to the front, the pilot, even before the take-off, rashly insisted upon flying into and over enemy territory. I was asked to participate in this first flight, but declined because I had a foreboding of disaster. Besides I was convinced of the failure of the experiment. I was right. The JU-52 was shot down over Besancon by French flak since the irresponsible young pilot flew directly into France. I regretted only the loss of the decent young SIS soldiers that had to pay with their lives for the pilot's folly. Thus ended the idea of installing intercept stations in aircraft; an idea which had already been planned on a considerable scale. Only a year later when SIS missions were successfully flown from Norway and Africa, was the project revived in proper form.

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ge of Com-  
ers

At this time our battalion commander was relieved. His successor, formerly head of the Chi-Stelle in Berlin, brought new blood into the organization. Leitstelle and battalion were brought under one command. This combining of operations and administration showed good results immediately. Incapable company officers were relieved, and a steady stream of new personnel and equipment enriched the battalion. Now came the problem of training this personnel. I proposed to institute courses for intercept and D/F operators, and also for evaluators. After the battalion commander was won over to this idea, he had to sell it to the regimental commander, who in turn had to secure the permission of the Chief Signal Officer. After six months of this sort of delay the courses were finally started.

SIS School Socking

For the school's site I proposed my old intercept station in Socking. The building had to be taken over without furnishings or equipment. Thanks to personal contacts I had with the Army I succeeded in getting it properly set up in a short time. I was charged with the direction of the school. For my staff I had one civilian technical adviser and three sergeants. After classes we had to prepare all the material for our program of study. From the very beginning I favored the principle of teaching no theory, but introducing the men to the instruction by means of practical work. For this purpose we set up the former intercept room again. Intercepted material had to be evaluated by the intercept operator himself.

Director of the  
School

The first course lasted three months. Company commanders had been ordered to detail only experienced operators to the school. Of course they sent us the worst ones they had instead. Despite this we succeeded in bringing almost all the men up to a speed of 20 to 25 words per minute within the appointed time. After the course was concluded, there was an examination before a board, consisting of the battalion commander, a company commander, and an SIS officer. Teachers and pupils could both be satisfied with the results. After that I set up an evaluation course. This doubled the work I had to do. The men attending the course were soldiers, some of whom had already worked in evaluation sections, and intercept operators who were to be taught evaluation. This time the out-stations sent a higher grade of personnel. In this respect the first course had already borne fruit. The unit commanders began to recognize the advantages which accrued to them when they had personnel properly trained in specialties. The evaluation course also brought good results.

valuation course

Officer courses

In August 1940 the W-Leit 3 received its first large group of officer students. They were a dozen senior officer aspirants who had just been graduated from the War College. Before assigning these young officers to serve with companies, they had been sent to me for SIS instruction. At first they considered it far below their dignity as graduates of the War College to take another course in a service school.

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But since it took only a few hours to teach them that they really did not know anything yet, most of them soon became enthusiastic. They went through exactly the same course as the soldiers before them. They had to learn the code, were put on the sets, and assigned to work on evaluation. Some of these officers later on did extremely well in the SIS.

f of W-13

In January, 1941 I was given command of W-13 in Oberhaching near Munich, in addition to my duties as chief of the Signal Intelligence School at Söcking. Here was a shining example of how much an officer thoroughly incapable in Signal Corps work as well as administrative functions could ruin a good unit. W-13, which I remembered as a good signal intelligence station, had lost all significance due to bad leadership. I had no opportunity to introduce any very radical reforms into this station, as I was in command for about three weeks only. But I did the best I could to bring the moribund organization back on its feet, from the point of view of soldiering at least. At that time W-13 was engaged in covering Italy and French traffic in Africa.

After being held in southern Germany over six months, and on this account missed the French campaign, I was remembered now that the evaluation of traffic in the West was becoming more and more important due to the palpable growth of the RAF. Several station commanders had tried their hand at the post without much success. So in March 1941 I was given command of the Chi-Stelle des Ob.d.L., Referat B, in Asnières sur Oise, about eighteen miles north west of Paris. This included a company commander's job, as in the neighboring village of Noisy, there was a large intercept platoon. My mission as chief of the Chi-Stelle was to check the signal intelligence obtained by the Luftwaffe against that culled by the Army and Navy, and combine them; also to furnish the three W-Leitstellen, which worked on the West, with intelligible directives; to revise the antiquated working methods of the Referat; and finally to begin the evaluation of navigational aids, utterly neglected by the Referat up to this time. In addition there were conferences with the Reichspost on the matter of special observations in the VHF band. There were also additional operational and administrative SIS problems occasioned by the fact that Luftflotte 2 had departed from Brussels, and the Referat had to care for their out-stations remaining on the Channel Coast.

Until my arrival peace-time procedures still ruled over the work in the Chi-Stelle. Every day the logs of the out-stations were sent in by courier or teletype, were made into a situation report, and passed on to the operational command without an attempt being made to digest the important aspects of these logs by an intelligent evaluation process. The Chi-Stelle should have undertaken to put the processed material which arrived from the out-stations into a form consonant with the requirements of the General Staff, and seeing to it that the

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Transfer to Chi-  
Stelle des Ob.d.L.  
f.B. in Asnières  
sur O.  
March, 1941

Reforms of the  
Referat

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History of Luft-  
waffe H-reports

experience derived from this service would serve to improve the tactical operation of the SIS. In general this function should have included clarifying questions of interest to operations and intelligence at headquarters, notifying the General Staff of indicated events, guarding against surprises by the enemy, and keeping the out-stations posted on all new developments, new questions, and the like, which the Chi-Stelle was in a position to do on account of the quantity of material that passed through its hands. Of all these things, not one had been thought of. I started by reorganizing the whole evaluation process from the ground up. Then I introduced the first monthly reports ever put out by the Luftwaffe SIS. I insisted from the beginning that our work should be condensed into an intelligence report to be published at least once a month, in order to achieve the following:

1. A survey of the change in the enemy situation within a given period of time;
2. To provide evidence of the extent to which the operational command staffs depended on the work of the SIS.

Up to this time information was only passed on by telephone or teletype to the General Staff. A-2 thereupon incorporated this information in their own reports, of course without mentioning the source, so that the SIS practically never came to the attention of the highest echelons. My superiors at first would not hear of a monthly report; they regarded it as a superfluous historical enterprise of no current value. Finally they allowed themselves to be convinced and had me draw up a sample report. My commander, Col. Gosewisch, liked it very much, but soon there came a spate of infuriated protests and prohibitions from A-2, which office was most sensitive about the prospect of loss of face due to the fact that the material appearing in the report was such as previously they had taken the entire credit for. The result of this was a complaint to General Martini, who ordered me to straighten out the matter personally. I flew to Berlin, and after checking with the offices of OKW, OKM, and OKH which I had included in the distribution, and who were all most grateful finally to receive operations summaries from the Luftwaffe, I thereby put the A-2 of Luftwaffe General Staff in such a position that it had no choice but to let me put out my report as I wished. The truth of the matter was that even then about 90% of the intelligence at their disposition was furnished by the SIS. In this way also the Luftwaffe signal intelligence service had its position assured in the matter of turning out reports for the higher echelons, which gave it a much more independent relation to the different A-2's.

Reforms in the  
Cryptanalysis  
Platoon

An evil heritage which I came by at this time was the cryptanalysis platoon, which actually belonged to the Chi-Stelle, but was billeted in Paris near SIS Battalion headquarters for no very good military reasons. The cryptanalysts in those days lived a life entirely their own, and enjoyed the cardinal advantage of having no one among their superiors

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competent to pass judgement on the quality of their effort. Although I was no master at their business either, I had done enough of it during my Army service to form a knowledgeable opinion. So these gentlemen engaged in the black arts of cryptanalysis had a hard time getting around me in their attempts to shroud their practises in midnight secrecy; for it soon became apparent to me that the motive behind their splendid isolation was contained in a passion for drink and loose women. As the intercept station that picked up the messages worked on was set up in a suburb of Paris, where they themselves had organized some splendid lodgings, they hesitated to come out to the country with me on the grounds that they could work well only when they were together with their intercept platoon. So I transferred this intercept platoon out to my company; and after being told that such a change of location could not fail to injure reception, carried out the reception test personally, with great success, and thereby forced the cryptanalysis platoon to come under my immediate supervision. It was soon evident that despite the personal difficulties arising out of this move, the cryptanalysts put out a much higher grade of performance after being forced to live a sensible life; and at the same time the Chi-Stelle could give them valuable hints for their work.

Coverage  
November 1940 -  
April 1941

During this time the British fighter R/T traffic changed over from HF to VHF. Following this traffic was most important to our reconnaissance planes, which had to fly deep into British territory on their missions. As chief of the Referat I had little influence over the operations of the intercept platoons, as operational questions fell to the Battalion Commanders. Our engineers responsible for VHF operations racked their brains with calculations trying to figure out on what mountain or at what elevation the VHF waves could be intercepted, because of the curvature of the earth. This was rather a matter of life and death to our recce crews. I exerted pressure from the beginning to have the traffic intercepted from the ground, as this was the only way useful results could be obtained. Irritated by all this theorizing I suggested to the C.O. of W-Leit 3 that a Tech. Sgt. I knew be sent to the Channel Coast with a VHF receiver. After a half a day this T/Sgt. picked up the first VHF traffic with the help of a home made antenna, to the unlimited astonishment of the engineers, who had already requisitioned a captive balloon for VHF reception on the basis of their calculations.

Reorganization of  
the Evaluation of  
Navigational Aids

I revised the processing of captured Navigational Aids by putting a capable inspector from my former signal intelligence school on the job. The department he set up in Referat B turned out in the course of the years the most valuable technical reports of the whole signal intelligence service.

Transfer to Athens  
June, 1941

The war continued to spread. Jugo-Slavia had just been overrun, Greece and Crete taken. The Luftwaffe had settled down in the eastern

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Mediterranean. In southern Germany the Africa Korps had been activated and was in training. The battle against Russia was in preparation. Under these circumstances our High Command hatched huge plans. Enormous land masses and seas lay within the range of German conquest. During the course of an inspection by Col. Gosewisch, at that time chief radio officer of the Luftwaffe Signal Corps, he asked me how I fancied a signal intelligence organization in this extended region, so poorly suited to signal communication. It appeared that there was an intention of building up a concentration of signal intelligence installations in this area. These plans were further bolstered by successes over the next few months, when the boldest possibilities seemed to lie before the victorious German Armies in the Caucasus as well as in the African Desert. I explained to the colonel that our most important job should be the clarifying of the enemy ground organizations in this area, as this foundation was necessary for substantial coverage of the tactical traffic. I drew up written plans for a signal intelligence organization in the Southeast, which resulted in my transfer to Athens, with the remark that my work in the Chi-Stelle Referat B was completed and could be carried on by another officer.

In Athens I found a W/T company which had been covering Balkan traffic earlier, but which had become superfluous after the conquest of these countries, and was to be dissolved. Now it had come under the command of the Chi-Stelle, and I was charged with putting it in shape for other tasks. Naturally, W-Leit 4, the original parent unit, had taken out all the good operators and evaluators, and transferred them to other of their S.I. companies before turning over the unit. I put them to intercept the known Mediterranean frequencies immediately. But it was soon evident that not only was the state of training of the personnel inadequate, but the technical set-up was basically unsatisfactory for the task assigned. Therefore I requested immediately the erection of a rhombic antenna installation.

Rhombic Antenna  
Installation

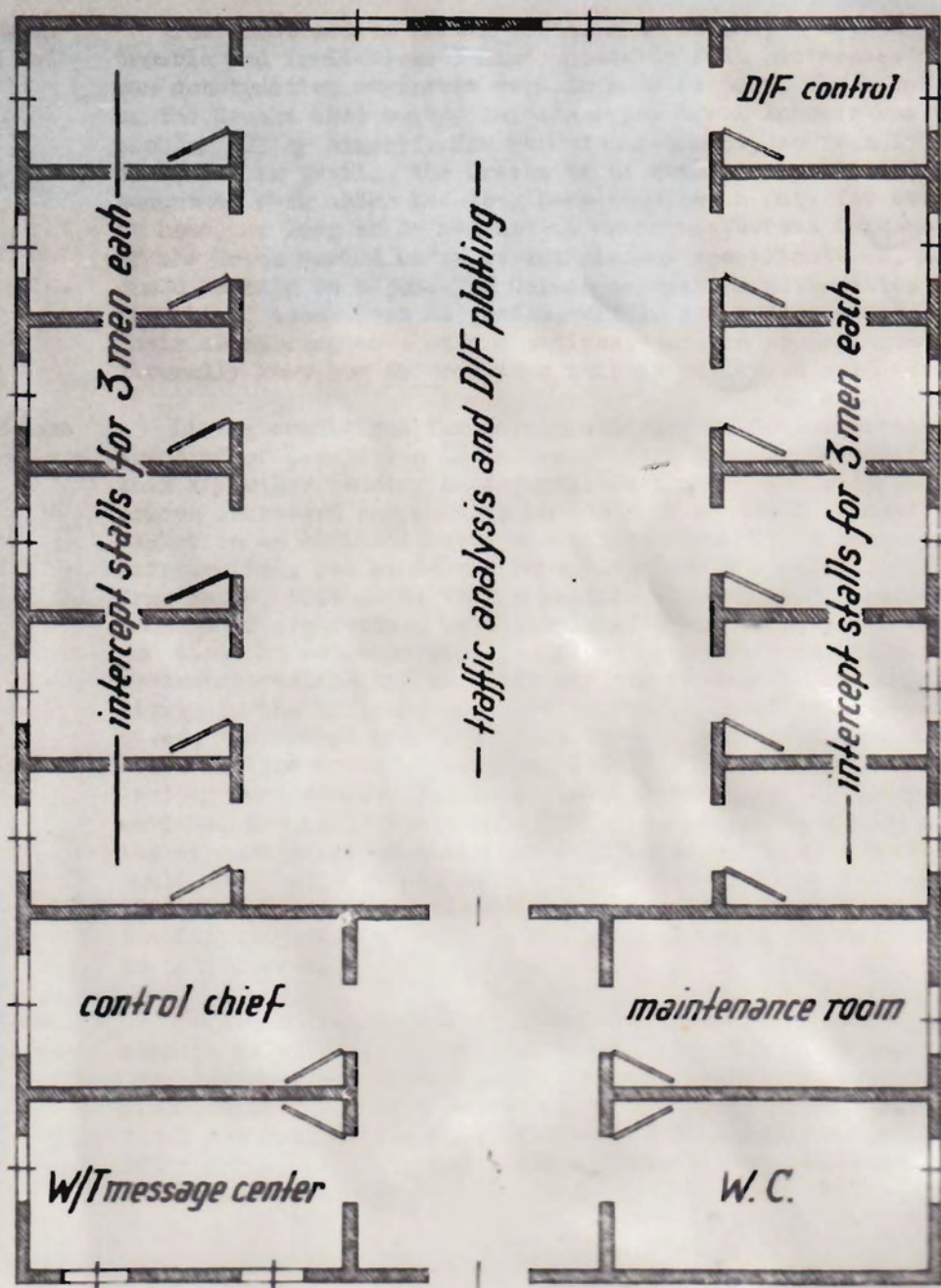
It was no easy task to find in that mountainous country the flat terrain which is the first requirement for such an installation. I searched up and down the peninsula in a Fieseler Storch accompanied by one of my engineers. Finally we found a Greek Postal Service installation in Loutsia, about 30 Km. southeast of Athens, which had been used for the W/T links between Greece and Africa on one hand, and London on the other. I had twenty rhombics erected here. In addition I drew plans for an intercept building according to the ideal I had in mind. A considerable battle was necessary with the Luftwaffe construction engineers in question before they would agree to construct anything different from that called for in their predetermined plans. But since I was not disposed to have my mind changed, they finally commenced construction according to the plans I gave them, but it was to be my own exclusive responsibility. (See Figure, Page 19a, for plan).

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Permanent intercept installation —

Loutsa / Athen. —

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periences with  
struction and  
eeks

The construction lasted a full nine months, and gave me no end of trouble and irritation. I must state in full bitterness that the German construction engineers were in many respects the identical breed as the Greeks that worked for them. The Greek laborer was a special problem all by himself. The German management, so roundly decried, never succeeded in getting the Greeks to do even an approximation of the amount of work which had long been required a duty for every German at home, as long as he was not in uniform. Whereas Germans in and out of the Reich worked under strict minimum specifications, no Greeks could be held to a job. The German occupation authorities in Greece thought of themselves as guests, and in a conflict would be harder on their countrymen than on the natives. And the transplanted orientals naturally knew how to work this idiotic policy to good advantage.

iving Conditions  
of German Soldiers  
in Greece

Living conditions for German soldiers in Greece were the worst of any Army of Occupation in Europe. Before the war Greece depended more than any other country on imports. As this ceased with the occupation, prices increased enormously; and only by an establishment of the black market on an official basis was a breakdown of the country's economic life averted. But since the occupying Army was paid in terms of German Army rates, this meant that a captain, for example, could buy just one package of cigarettes, or a couple of oranges, with his base pay.\* And since in addition supplies from the Reich were often interrupted by transportation difficulties and the rapidly increasing guerilla activity in the Balkans, and were generally insufficient when they arrived, the troops had to suffer; because out of exaggerated consideration for the Greek population, it was forbidden to procure supplementary food stuffs. The food shortage among German troops was often serious. Naturally these unhealthy conditions were made to order for the encouragement of dishonest practices. And many a German soldier who would have led a respectable life at home, fell by the wayside under this situation; and I was forced to sacrifice many working hours to the investigation of such cases, which I would rather have employed to better ends.

Company assigned  
British point-to-  
point

Together with construction of the intercept building my principal concern at this period was the retraining of the company I had taken over for coverage of RAF point-to-point traffic in Africa, and Asia Minor. Much pains were necessary to break the radio operators into their new mission, as most of them had been insufficiently trained. After making many representations I finally obtained replacements from Chi-Stelle Ob d.L.

\* Wehrsold, which does not include percentage of former civilian salary, which could not be spent in foreign countries.

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Cryptanalysis Pla-

My second worry was the cryptanalysis platoon I had brought along from Asnières for which the large quantity of enciphered traffic provided an abundance of interesting tasks. In those days a number of messages of new types had been intercepted by W-13 in Oberhaching, which covered Africa. These messages originated from a new supply net in central Africa. Part of these were simple codes, and the rest were in four-figure code. Since Athens was so much nearer the source of this traffic, I immediately put a few sets on it, while the cryptanalysts figured out the code book in short order. The messages contained information of all aircraft movements from Takoradi-Accra by way of Khartoum to the Egyptian front. Later, after cracking the four-figure messages we could even give information as to the type of each individual plane brought up via the supply line. Also the state of readiness of airfields, their requirements, and requests and requisitions made by the repair organizations were also known to us. Through this means it became increasingly clear, first to the specialists assigned to this traffic, and later to the German A-2, the enormous quantities of personnel and equipment which would be thrown against us if the advance into the Nile Valley should fail.

Relationship to  
German A-2 and A-3

A-2 could be approached on this subject, as they never ceased being impressed by the enemy's material; on the other hand at that time it was not yet possible for the Signal Intelligence Service to get anywhere with A-3, as this office was still completely bemused by our own successes in arms, and the considerable turnout of German production. Not until later years, when they had nothing left to throw into action, and German victories had receded into an unlikely past, did A-3 come out of its shell and seek to establish a connection with us - when it was already too late and none of the opportunities passed up would ever recur.

Weather Reports

We established the fact that in addition to the regular Allied Weather Nets, weather reports were also transmitted from several different tactical transmitting stations. We set about cracking these messages and succeeded in a short time. So we were soon able to furnish all German stations in the Mediterranean Area enemy weather reports. The German High Command thereupon discontinued weather reconnaissance flights in this theater.

Four-Figure Code

But this was more of a side line for my cryptanalysts. The task which called forth their maximum efforts was the cracking of the four-figure code, which I was sure would reveal the enemy air force organizations to a considerable extent, as well as providing an inside picture of individual circumstances. The situation was hopeful as long as a continuous and sufficient quantity of traffic was forthcoming. I used every means available to increase reception, carried out constant improvements with my technicians, for want of sufficient radio operators had administrative personnel trained for intercept, saw to further

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training of intercept personnel, etc. In this way I gradually succeeded in increasing the daily quantity of messages intercepted to a sufficient extent that the cryptanalysts began to see some possibility of success in their work.

Difficulties,  
Sickness  
End 1941

The first attempts failed. After a few weeks of no success at all they explained to me that the code could not be cracked. By a few words of encouragement and constantly working with them, I was able to give their enthusiasm for the work a fresh start. Again and again I held up to their imagination what a success it would be for radio intelligence if this code could be cracked. Unfortunately I came down with jaundice just when I was most badly needed. As the Marstall refused to send a man to take my place, I was compelled to run the company from my sick bed. The only officer I had available was engaged in supervising an intercept platoon thirty kilometers away.

Cracking of the  
Four-Figure Code

Finally in December 1941 the code was cracked. Even if no immediate value could be derived from the already three weeks old messages which had been deciphered, the enemy's entire ground organization could be learned. And this secured a foundation for the whole evaluation work for years to come.

Distribution Groups  
Second half 1941



A further source of intelligence for the evaluation section was the distribution groups in the preamble of every message. They were very skillfully put together, it is true, but they could be read with the help of the decoded text. And their semi-annual change did not alter this fact. The distribution groups were a great help to operational intelligence as well as cryptanalysis. As the enciphering of the four figure messages became more complicated from one week to the next they provided the means of breaking into the text. Besides they made it possible to recognize alterations in the chain of command, transfers of units, and therefore the intended operations of the enemy, in very good time. And when the four-figure code changed and it was no longer possible to read the text, our operational evaluation was much indebted to the enemy's continued use of these distribution groups.

Coverage of Turkey  
Fall 1941

Next I undertook the operational revamping of the company's platoons. One of these covered Turkey. The results of its work were not satisfactory in the smallest degree, for in the first place the Turkish transmitting stations operated on a very low output, especially R/T; and in the second, the point of reception was within the area of skip. So I transferred the outfit to Kavalla on the Macedonian border where the angle of refraction was much more favorable. The quantity of traffic intercepted also increased. Later I had the same outfit set up a station on the island of Rhodes.

The coverage of Turkey had for us only a secondary importance. The

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logs were sent in to a sub-section of Referat C in the Marshall who turned out a monthly report on it. It became pertinent first in 1943, when we undertook our island campaign in the Aegean Sea. During this time Turkey remained strictly neutral, and conscientiously respected its agreements. She aided us extremely, however, in pursuing British shipping movements in the Aegean, by means of her police radio reports. Later on I transferred the platoon to Mitylene, an island near the Turkish coast; and, because communications there became very difficult, later on to Constanza, Roumania.

Autonomy  
First Winter in  
Athens. Transfer of  
the Evaluation  
Section  
December 1941

While all this work was in progress winter set in. Since our provisional billets in Loutsia were no more than summer houses, I was faced with the necessity of finding more permanent quarters for my unit. Besides the company had grown much too large for the primitive quarters we occupied. So we took over a big office building in the center of the city of Athens. Here at last my evaluation section had handsome and comfortable rooms to work in. We could now accelerate the cracking of the four-figure messages to such an extent that most of them could be read after three or four days. At the height of this work we intercepted six to seven hundred messages daily. They contained an abundance of indications of enemy operational preparations, enemy strength returns, new shipments, types of aircraft, submarine hideouts, etc.

ties of an SIS-  
Company Commander

This second half year of my tour of duty in Athens was certainly the most difficult of my military career, since the company had grown up to its task, and every day brought new and fascinating problems. But at the same time we began to gather the fruit of the hard labor performed. I put my desk in the middle of the evaluation section and later, as battalion and regimental commander, I required the same of my company commanders. I noticed again and again in the case of officer replacements sent to me from other units that these men, regardless of whether they were battalion or company commanders, had held themselves somewhat aloof from their subordinates, and consequently their proper duties passed into other hands. Up until my last day of service I always made it a principle to live and work among my men. Only so was I in a position to estimate the difficulties that cropped up and correct the mistakes that were made.

IS Platoon Africa  
first half 1942

As Romel's advance in Africa was making good progress, I proposed to my commander at the time to send a strong signal intelligence platoon to Africa, to set up operations behind the front. First a search was to be conducted for traffic which had not yet been heard. This uncovered some new tactical nets and also the British Aircraft Reporting Net. In this way the intelligence picture from radio sources was made more complete. Soon a large part of our work was devoted to the deciphering of British aircraft reporting messages. At the same

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time I sent an H/F D/F team to Africa. An additional D/F mission to the Siwa Oasis did not come about, for the Afrika Korps had already begun its retreat. As I had to bring my platoon back to Greece because of the unfortunate developments in the military situation, I set them on Mt. Parnassus, 1250 meters high and north of Athens. Here signal strength was good and they could continue covering the same traffic as in Africa with little noticeable differences. Coverage of aircraft reporting nets in Africa constituted an important step towards the subsequent high development of aircraft tracking technique.

Operational control of 9./40 in Crete.  
First half 1942

After the conquest of Crete, when the X. Fliegerkorps was moved to the island, its SIS company accompanied them. This company specialized in air-ground traffic. The quantity of enemy radio traffic increased so rapidly in the Mediterranean area that this company no longer had a reason to be independent, as there was too much for it to handle with its own resources. Therefore, I persuaded the Chief of the General Staff of the Fliegerkorps to put this company under my operational control in the interest of better co-ordination. This was very much contrary to the desires of the Korps -2 who had up to that time used this company as an exhibition piece. Furthermore this operational subordination was only a halfway measure, for being under the administrative control of a regimental or battalion commander who was a total stranger to the SIS, it had still plenty of room in which to exercise its independence of my control. When later I became battalion commander my first task was to get administrative control of the company, after which, thanks to the larger framework of which it was a part, it turned out splendid work.

Collaboration with Italian SIS.

In the spring of 1942, the Chi-Stelle in Berlin ordered me to send a liaison team of four or five cryptanalysts to the Italian Admiralty in Rome. This team was to instruct the Italians in the reading of four-figure code messages. From the first I mistrusted this enterprise and warned Berlin against it repeatedly. Therefore I purposely submitted to the Italians only the most worthless messages with which nothing could be accomplished anyway. This brought about a steady stream of complaints from the Italian side. I also was reluctant in carrying out the order to collaborate with the Italian Signal Intelligence Service in Athens. I furnished mostly Turkish logs to them, as this involved no risk of harm coming to us. As far as Allied traffic was concerned I gave them only a few frequencies and call signs. The Italian Signal Intelligence Service had little value. Their radio operators, in themselves adequate, were very poorly commanded, and neither cryptanalysis nor evaluation advanced beyond the elementary stages.

Setting up an H/F base line

In April 1942 my intercept station installation in Louisa was so far along towards completion that it could operate at full strength.

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It was complemented by a base line which I established using the D/F stations in Constanza, Athens, and Catania. In this way it was possible to give fairly accurate fixes.

### Bringing Together of Interception and Evaluation

Now I could carry out the plan closest to my heart, namely bringing interception, traffic analysis and D/F plotting together in one room, providing immediate contact between the responsible evaluators and the operators on the sets, the better to expedite flash reports. At first the evaluators met this innovation with distrust, but were won over to the new arrangement by subsequent successes.

### Allied S/W Nets Spring 1942

A notable increase in our intelligence output was brought about when we succeeded in deciphering Allied Signal Aircraft Warning reports as well as those of the Aircraft Reporting Service. By deliberately sending our own planes within range of these radars we cracked their code books in a few days. Evaluation of traffic from aircraft reporting and S/W units was very useful for flash reports and flash warnings. Thanks to these, a current picture of all enemy aircraft movements was always at hand. They confirmed unit transfers of which information had been obtained through other sources, and they made it possible for German planes to be guided through areas where aircraft warning services were ineffective or sparse.

### General Martini's visit April 1942

When General Martini inspected the company he extended warmest congratulations to me on its operations and administration and charged me with setting up an independent battalion, as my unit had long since exceeded the normal strength of a company. Despite the insistence of my superiors, I could not become a battalion commander, because I had not been a captain quite two full years and the General considered me too young for the job.

### Signal Intelligence Battalion Southeast Summer 1942

After the arrival of new personnel, sent from different replacement battalions, I divided the company in such a manner that one part constituted an intercept unit, and the other an evaluation unit. This was the foundation of the new battalion, which in the course of time I brought up to the strength of seven companies. The first battalion commander was an old Lt. Colonel, known far and wide as an incompetent, who had never commanded anything larger than a company. He brought along with him five officers aged from nineteen to twenty-one all recent graduates of the War College, who did not exactly enrich my personnel. Although I strove to maintain the best will in the world, because of concern for the job and ingrained discipline, and did everything in my power to continue the development of my work, the peculiar makeup of the command, and the inborn mistrust and desire to run things his way which beset the new chief, provided such an impediment, that the work soon dropped off and came to an operational and military standstill. Thanks to this Lt. Col., the radar intercept company

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activated at that time sat around doing nothing for six months, because neither the company commander nor the battalion commander knew enough to put them to work.

Criticism of General Martini

One of the most serious faults of the German High Command - and General Martini was the very incarnation of this fault - was that men who had made themselves popular for one reason or another, and held an important position, were allowed to remain there long after their erosive influence, and even downright dangerous propensities, had become proverbial. While Göring on the one hand announced the daft principle that he would suffer no battalion commanders with grey hair, Martini on the other, had no use for one who was not his own age or older. When anyone tried to call his attention to the technical or tactical incapacity of these old men, he would always answer: "Am I to throw my old officers out on the street?"

First and last leave taken during this war August 1942

Because of these trying circumstances, and a hangover from my winter illness which was not quite cured, I decided on the advice of the company medical officer to take an extended leave. Already in peace-time I had bought a piece of property near Munich where I was able to take a few weeks rest. This was the first, - and last - leave I was to have for the whole war.

Low ebb of the SIS in the Mediterranean Second half 1942

After my return, I took over command of the intercept company, as the battalion commander had reserved command of the evaluation company for himself. While the Allies at that time had concentrated the bulk of their power in the Mediterranean Theater, during these same fateful months the command of the two signal intelligence battalions of the Taormina - Athens area was intrusted to commanders innocent of any knowledge of the SIS, who not only failed to develop any ideas of their own, but conscientiously stamped out any joy of achievement and honest effort on the part of their subordinates. At this time there was also formed an SIS liaison team with the staff of the Luftflotte, headed by a dipsomaniac Lt.Col. whose sole objective in life was his evening's drinking bout. So the German High Command was completely taken by surprise when the Allies landed in French North Africa. Not until the Tunis campaign was well under way did W-Leit 2 at Taormina pull itself together and contribute to the general effort by intercepting air support messages.

Stagnation of Operations, Further Construction of Rhombic Installation. Summer 1942 - January 1943

So there is nothing much of a positive nature to report on the period between the summer of 1942 and January, 1943. Evaluation continued to live for this period on the capital which had previously been accumulated. A radar intercept company had been formed without attaining any results as yet, because neither the battalion nor the